

# **Learning Process and Knowledge Management in Local Lanna Communities Through Electronic Media**

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## **Abstract**

Information and news are certainly significant for people as a basic right that everyone can be able to gain access and use in everyday life. This study has three main objectives: (1) to investigate the learning processes of local communities of the north of Thailand using electronic media; (2) to investigate the knowledge management of the two communities through electronic media; and (3) to investigate the patterns of media usage which suit to the two communities learning. This study investigated in the two local communities in Chiang Rai province, Thailand. The result shows that the two villages have similarly characteristic structure of information receiving; most villages acquire an information from the centralization system through a variety of media. However, the two communities have used different media types and have different numbers of community grouping. They have a similar pattern of information exchanging among the community's members. Likewise, people in the two villages usually make an information judgment by comparing media contents with different media channels.

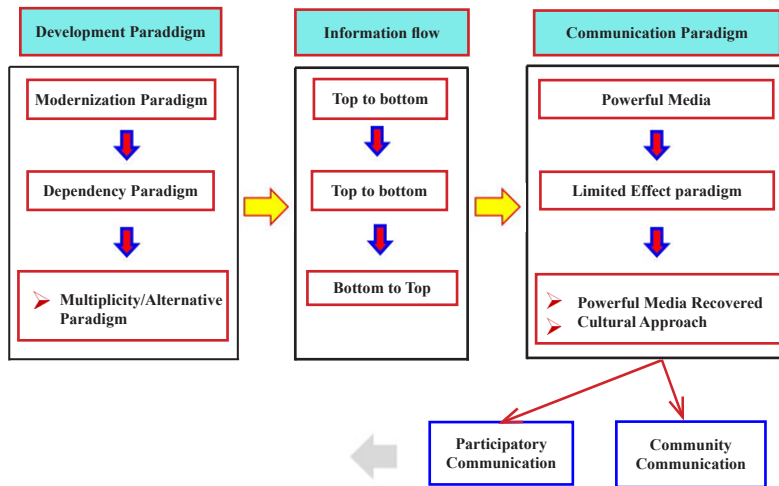
**Keywords:** Learning Process; Knowledge Management; Local Knowledge and Electronic Media

## Introduction

A paradigm shift of globalization is the main cause of the development of the social environment, technology, communication and emerging of new knowledge. This development causes to change a pattern of society activities which allows creating an awareness of human values. This change allows people to govern their environment and their own political destiny; this empowers individual to rule themselves (Rogers, 1976 refer Inayatullah, 1967:101). Developing country especially Thailand gains the effect of this changing discourse; the paradigm shift makes the change from the development pattern of western modernization to the development based on multi-culture. This phenomenon of development paradigm influences consequently to the paradigm changing of communication process; it can be illustrated as Figure 1; it is also mentioned by Kanchana and other (1999). According to the figure 1, modernization and dependency paradigms bring the information flow from top to bottom; this type of communication is controlled by the central government (adopted from Kanchana (1999)). However, this information doesn't suit

with the community context and doesn't meet the requirement of local communities; villagers cannot use the information for their everyday life. Additionally, much information from the center doesn't up-to-date. Zane Ma Rea (2013) studied Buddhist wisdom and modernization in Thailand; she found that numerous outsider knowledge had influenced to the impact of globalization process in the country. This outsider knowledge which she calls another term 'modern knowledge'; it comes from western countries to make Thailand as a modernization country. The modernization is influenced by various significant factors: global education services market and technological communication; these factors help to open Thai culture to modern knowledge. This development changes the concept of powerful media effect to the participatory communication; it emphasises on a local community joining

in the communication process, channel and media creation. The participant can be both a receiver and a sender. Media contents are also consistent with the community requirements. Kanchana (1999) proposed to re-position a new role of new communication pattern; it should be changed status from a carrier of a new concept from outside to inside community. The communication in all media channels should be played a role as a facilitator; this can come from every news source to the community. As the communication concept is changed, the research in which relates with has to progress.



**Figure 1** Evolution of communication for development in Thailand

Knowledge content is mostly contained in different types of media and channels. Most knowledge-based media does not work as standalone media; it associates with communication devices or tools for high efficiency. People make use of communication tools for knowledge exchange; the communication tools can be an analog or electronic form including digital tools such as mobile phone and internet television. The electronic tools suit for multimedia form; it can contain a variety of content: text, image, sound and video. However, knowledge exchange does not happen through media only, but it connects with interactions between social processes and

physical things and factors such as technology; this creates broader social relationships and process (Farrington, Clare, Holland, Barrett, & Oborn, 2015). Knowledge in community informants can be divided into two kinds: tacit, personal knowledge; and explicit, expresses knowledge which person uses to communicate with other (Tsui, 2009). Mattos (1991) mentioned the knowledge in person that:

*Two different persons generally have different knowledge of the same domain. Distinct domains generate clearly distinct knowledge. And the domain knowledge of an individual usually changes with the time since people commonly observe new things, make conclusions, etc. so that they change their perceptions of the aspects of this domain. (Mattos, 1991)*

Knowledge in a community has enormously varied; it has to be managed for the highest useful. Brelade and Harman (2003) made a reviewed knowledge management as follow:

*'It was defined as the process of transferring knowledge from one place to another, thereby solving a problem effectively and quickly. In another it was seen as being a systematic approach to enabling people to access and use relevant information and as the ability to distinguish the 'wood from the trees'. Another organisation described it as 'the sharing of information amongst the community that makes up the organisation'. In a large utilities group it was seen as the process of 'linking the right people to the right information at the right time'. (Brelade & Harman, 2003: 5)*

As regard Brelade and Harman definition, knowledge management can be indicated to an activity process of people in communities that is capturing, developing and constructing, using and sharing knowledge among their own communities and others in an effectively way. Evans and Irish (2013) investigated structures of the participant in south Bristol (UK); they made use of video and website as sharing and learning media for participants in a community. They found that a number of community audiences becoming the content providers increasingly; this is same as a number of content users. This result

showed that using media as the tool for capturing and sharing local knowledge blurs the line between doing and watching, and teaching and learning among people in the community. Another scholar studied an applying media as the learning tool for sharing knowledge in a community; Pusadee (2007) investigated learning process and transmission of folk wisdom in pottery in Thailand; she found that people transmitting their knowledge in unsystematic. She suggests that to learn to do artwork effectively in local community; it should apply documents and audio-visual media to record knowledge; this will help both formal and informal education.

This study selected two local communities in the north of Thailand for the case study; they situate in Chiang Rai province or calls Lanna region, which has a long history more than 750 years. This region has many ethnic people and mixes multi-culture, arts and traditional together; however, it still preserves their identities and inherits until present. A collective knowledge is a knowledge that is transferred from a generation to another generation through retention, recording and telling. However, there is some knowledge lost due to a history event or incomplete of knowledge transferring, otherwise, it never be used because of unsuitable with the social environment and way of life that changed. Apart from persisting knowledge and Lanna wisdom that still exist; some of them mixes with a new knowledge or be applied for compatible with a context. A new knowledge can be transferred to communities in many ways and patterns. However, a new knowledge requires specifically medium and media channel for communication especially electronic media: radio, television and internet; these media have the potential to transmit data in term of fast sending, convenient and multi-data transmission. Popularity media influence a community perception and help to set the way of life in the community. Communication and learning process in community are always existence; people in a community also manage a knowledge among their groups and have a networking member. They manage knowledge by selecting,

using and applying, recording, retention, transferring and exchanging. Nevertheless, sometime there has a crash join between a traditional knowledge and new knowledge. Most previous researches investigated the type of knowledge and process of knowledge management, but they hardly focus on a learning process in the community, knowledge acceptance and usage. None of them studied on an appropriate media pattern that fits for knowledge transferring in a community such as media design and media content. Roger (1976) mentioned about many communication scholars started to have a question in their own previous assumptions of the investigation; and this leads to have the critical issues: (1) the content of media, (2) the social needs – when structural communication changes due to the shift of development, and (3) the classical diffusion-of-innovation aspect that suits to describe the micro level of development.

This research investigated type of the learning process and knowledge management in two Thais local communities. The study focus on various level of informants: individual, family, and community. This research studied local knowledges: mainstream and minor knowledges in term of a new knowledge and traditional knowledge. The study also emphases on the process of knowledge creation and transferring, communication process, media content and media effect.

**Terminologies used in this study:**

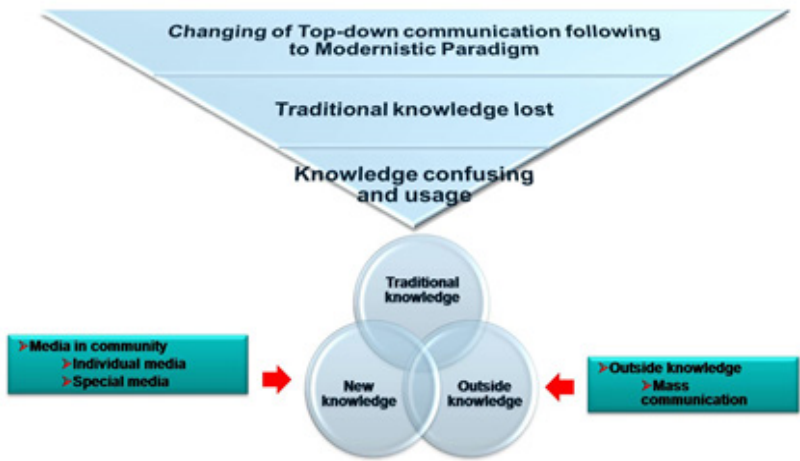
Learning process	it refers to community activities or process that local people learn and gain knowledge or skill from various ways such as practicing, learning from media perceiving in different types, experiencing something.
Local Lanna	it was the name of Thai Yuan kingdom where had an area cover a northern part of Thailand, some part of Yunnan, China and Myanmar. Lanna in this study represents the northern area of Thailand

that covers eight provinces: Chiang Mai, Lampang, Lamphun, Chiang Rai, Phayao, Phrae, Nan and Mae Hong Son. However, the author chooses randomly some communities in Chiang Rai as the case study of investigation in the local learning process.

Electronic media it concerns to work-based electricity media including the digital media; the media that people in communities always use to communicate and get information and news such as radio, village public address system and television.

### **Conceptual Framework**

As regards the figure 1, the problematic approach of top-down communication with modernistic paradigm leading to the development without traditional knowledge concerned; it causes to lose a lot of communities' wisdom. This problem scenario can be illustrated in Figure 2 (Kanchana, 1999). This leads to community confusing in a way of using a new knowledge or how to adapt it with their own knowledge. Knowledge in the community can be categorised in three ways; traditional knowledge, outside-in knowledge, and synthesis knowledge (Simalak et. al, 2006). These kinds of knowledge lead to a process of community learning (Figure 3) included an information receiving of individual through electronic media. The process of community learning can be referred to a knowledge acceptance, evaluation comparing with traditional knowledge and applying (Prichanjit et. al., 2006). Besides the process of community learning enhances to create a new knowledge and transfers this knowledge to a family member in a community; the first knowledge learner of family members is called a learning leader.

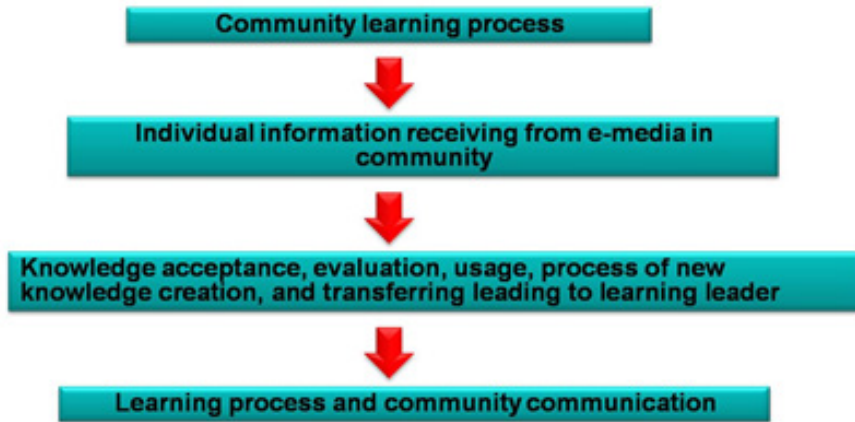


**Figure 2** Paradigm of knowledge creation in Thai community

**Research Scope and Unit of Analysis**

This article investigates two communities in Chiang Rai province during 2010 to 2015, Thailand: Roong Kor Muang Kham village (Saengkor, 2007) is a half-city and half-countryside in Mae Chan district and Hin Lard Nai village (Kongsawat, 2005) is a hill tribe community in Viang Pa Pao district. This research focuses on the learning process of Thais north communities through using of electronic media in term of knowledge acceptance, media usage and applying, media patterns, and suitable media content for learning communities. Furthermore, this study also includes a knowledge management of communities after they made use of electronic media in a way of knowledge creation, usage, recording, and transferring among individuals, family, and communities. This includes the media effect and knowledge facing between traditional and new coming knowledge which influence to way of life in community (Surapong, 2007).

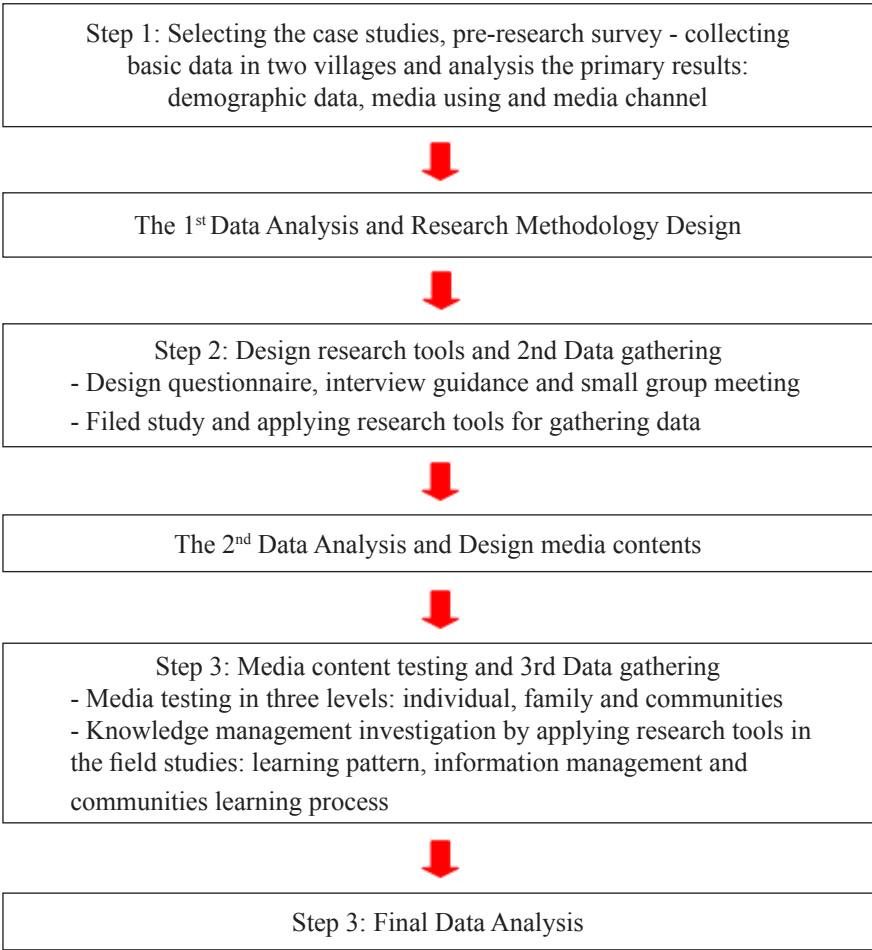




**Figure 3** Conceptual framework

### **Methodologies**

The learning process and Lanna local knowledge management with electronics media are a case study research; this study integrates with the interdisciplinary approach both quantitative and qualitative analysis to interpret a media content and user behavior. The investigation applies a multi-method data collection which includes an observation in participatory and non-participatory, interview by questionnaire and small-group meeting. Investigating two Thais local communities, the research adopts different conceptual frameworks: learning process and knowledge management (Barnes, 2002; Garvey, 2002; Kermally, c2002; MICT, 2004; Holden, 2002; Housel, c2001; Huff and Jenkins, 2002), media and communication theory, semiology (Tangnamo, 2004; Chandler, 2002), Meaning construction theory of media portrayals, Content and audience analysis and other (Altheide, 1996; Defleur and Dennis, 1994; Lerner and Schramm, 1967; McQuail, 1997, 2005). The investigation consists of three research steps as Figure 4;



**Figure 4** Diagram of research methodological workflow

As regards the diagram of methodological workflow (figure.4); it can be described as following step details:

- The first step is Pre-research; it is a pre-surveying and gathering a basic data; this aims to collect data from documents reviewed and from the local communities by integrated with the quantitative and qualitative methodologies. The initial research collected 38 samples from two villages. The result from the first step is used to design questionnaire, interview guidance and small group meeting. The main research tools are:

- Open-ended questionnaire
- Sound recording

The result from the first step is used to design research framework and methodology.

- The second step is the process of tools design for data collection. Consequently, these research tools are used to implement in the communities fields. The result from this step is used to design the contents of a media program.

- Questionnaire
- Interview
- Small group meeting

- The third step is a media content examined and seeking an information requirement of local communities. This investigation starts by design a content of media program and testing with amount villages samples; this includes the investigation of basic information requirements and behavior of information receiving. This step applies both qualitative and quantitative method for collecting data in two villages; the amount samples of two villages are 38 people. The techniques for seeking information are:

- Demographic data
- Pattern of an information and news receiving, behavior of information receiving
- Media channel, media genre and type of information.

- The final step is a data analysis and interpretation. The total sampling of villages from two communities is 38 people. This study applies SPSS program for data analysis such as T-test and histogram and using data coding and transcribing for qualitative data. The research process can be described as the following diagram:

## **Results and Analyses**

The investigation shows the statistic of media devices in the household; it found that each family has a media device more than one electronic equipment for receiving the information and news at home at 81.6% (Table. 1). This statistic shows in the histogram of Figure 5; the graph tends

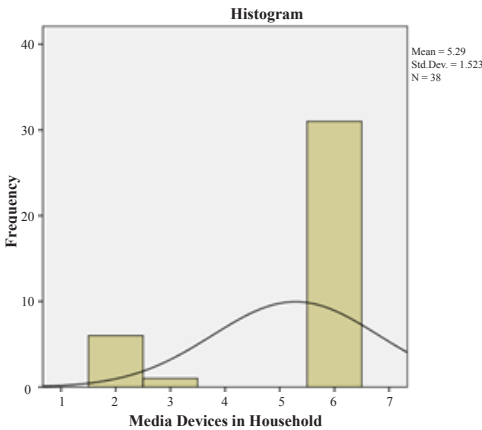
to distribute as the bell shape on the right side. Home is a popular place for people acquiring an information at 66% (Figures 6); according to the T-test, it gets a high significant of confidence at 95% (Table 2).

**Table 1** Statistic of media device in household

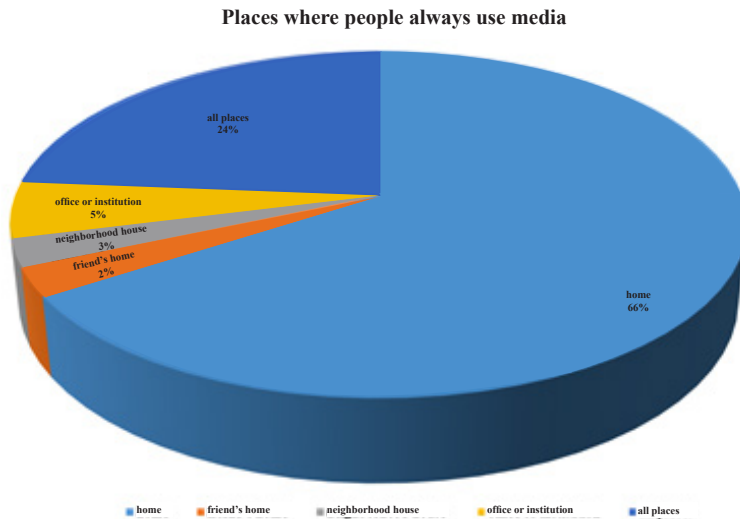
Media Device in Household	Frequency	Percent	Valid Percent	Cumulative Percent
Television	6	15.8	15.8	15.8
VCD/ DVD player	1	2.6	2.6	18.4
All media devices: TV, vcd/dvd, radio, internet, village public address system	31	81.6	81.6	100.0
Total	38	100.0	100.0	

**Table 2** T-test value of Places to get media

	t	df	Sig.(2-tailed)	Test Value = 0		
				Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Place to get media	6.399	37	.000	2.658	1.82	3.50



**Figure 5** Histogram of media devices in household

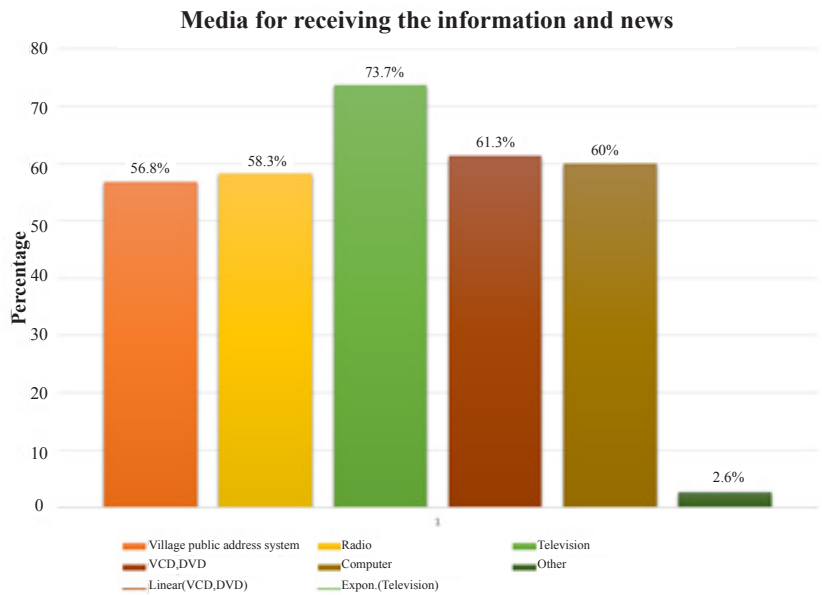


**Figure 6** Places where people always use media

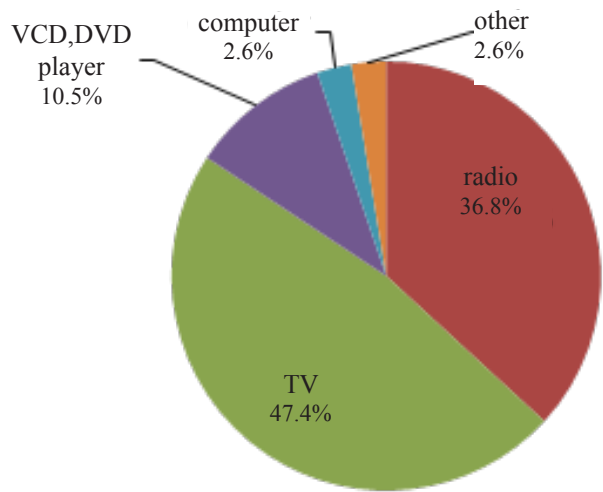
People in two communities use different media channels to get an information and news; they often get the information and news through the village public address system and the radio which have the weight value of receiving frequency in a moderate degree 56.8% and a little degree 58.3% comparing to VCD/DVD player and computer are 61.3% and 60% respectively. Conversely, they watch the television as the highest media for receiving the information and news at 73.7%, but in the low degree of the weight value. This result shows that people in the two villages trust the information and news from the village public address system more than the television. These data shows in Figure 7.

Nevertheless, the frequency of media using behavior shows in different ways; the radio and television are the media channels that the two communities use frequently to receive the information and news in everyday life at 54.3% and 91.7% respectively. However, people receive the information and news from the village public address system and the VCD/DVD three to four times per week. This result is agreeable with the media for receiving the information and news of Figure 7. The appropriate time for all villages receiving the information and news is similar; it is in daytime during 06.00 - 08.00 and 08.00 - 10.00 p.m. at 86.8% and 50.0%, and weekend in the same two periods at 68.4% and 42.1% respectively. The

documentary, sport, drama, and news are the contents that people like most at 65.8% and 21.1%. After they received the information, they share it among their groups in a number of 86.8%. The suitable media for the communities are television, radio and VCD/DVD at 47.4%, 36.8% and 10.5% respectively (Figure 8).



**Figure 7** Media for receiving the information and news



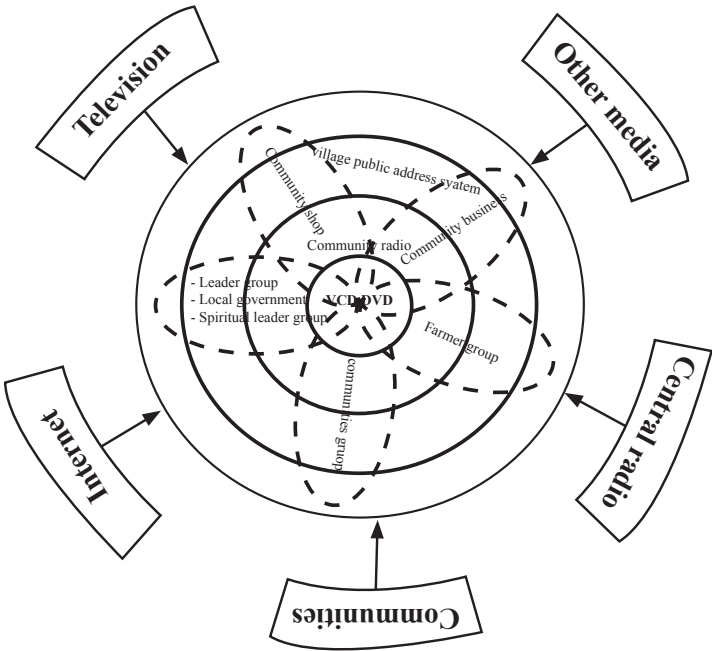
**Figure 8** Suitable media pattern for communities

The result shows that the structure of the information perceiving in the two communities are not different; they both receive the information and news from central media: television, the internet, VCD/DVD and others media. The media in which belong to the communities and be the most accessible are the village public address system and the community radio. The media contents which communities needed have various types depend on a receiver who uses it; the type of media contents associated with a way of each community life. It is similar to the appropriate time for receiving information. The media content also associates with characteristic media and the way of community practices. The television and the village public address system are the media types that suit for people in the morning and evening after worked; however, the community radio is appropriate for the daytime.

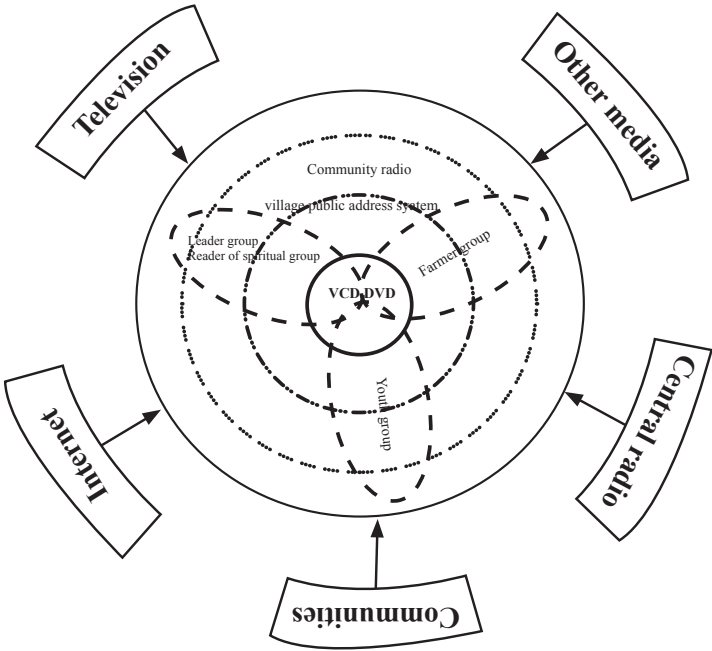
A pattern of information exchanging among the members of two communities is also found to be similar. The villages are always discussing and sharing information when they have the chance both within the family and within their communities. Furthermore, they often analyse and inspect the correctness of information by comparing with different media channels. Content display for a knowledge transferring by applying the demonstration technique with giving some sample from the best practice of the real results is attraction and trustworthy for two communities' members. In addition, the simple and appropriate technique for community environment can be adapted in a way of life is fast acceptance.

#### **Learning process and knowledge management process of Lanna local communities**

The structures of the information acquiring in Ban Roong Kor village (see Figure 9) and Ban Hin Lard Nai (Figure 10) are similarities; the communities receive an information and news from central through television, radio, internet and VCD/DVD. The electronic media, which belong to a community, are the village public address system, the community radio and the community radio network such as Karen radio network in Ban Hin Lard Nai village.



**Figure 9** Information structure in Ban Roong Kor village



**Figure 10** Information structure in Ban Hin Lard Nai village



In contrast, the two communities have different sequences of popular media type. Media using of Ban Roong Kor village (Fig.9) regards on the village public address system, community radio and VCD/DVD respectively; conversely, the media using of Ban Hin Lard Nai village (Fig.10) respects on the community radio, village public address system and VCD/DVD respectively.

There has another major different of media structure in the two communities; it is a size of grouping in the communities. Ban Hin Lard Nai village has an amount of small grouping less than Ban Roong Kor village; the community grouping includes a spiritual leader group, farmer group and youth group. However, the small groups in Ban Roong Kor village have various types; because of it is a large community, which is a half-city and half-countryside. Consequently, this large community is a capitalist economic group that consists of different small groups: farmer group, local government leader group, a local business group that has more than ten groups separating by the character of the product. Each group has connected by networking; they mutually depend on each other. The member of the group is a member of various groups and he/she is staying in the same family; therefore, the information is always transferred among group members all time. The structure of information flow in these two communities is agreeable with the conceptual framework of Figure 3.

#### **The pattern, form and content of electronic media that suit with communities learning**

People in Ban Roong Kor village receive the information and news through the television, the community radio and the village public address system; they are the main media devices in this village. The VCD/DVD player is the second media device of media using in this community while youth and children in the villages get more information from the internet. People have many requirements of various types of the media content depending on audiences; the villagers need the contents about an agriculture information, for example, the agricultures' product price and other information: political news, disease, health, documentary and entertainment.

According to the investigation of an appropriate timing for receiving the information and news; the study found further that the appropriate time for media broadcasting through television and the village public address system is morning and evening after daytime working from the field; the radio broadcast is appropriate for a daytime working. The media presentation associates with the timing of the community activities. Teenagers need a variety of contents: news, documentary, agriculture, education and songs; their appropriate time are a midday and after school.

Ban Hin Lard Nai village receives and accesses the information and news through the community radio, the television and the village public addresses system; the second media device is the DVD/VCD. The appropriate time of media using in this community is different because of the limitation of an electricity power which is produced by their own. The television in the community is provided during 07.00 – 09.00 p.m. according to the timing of the electricity power supply. The villages listen to the radio in the daytime when they work in the field, but the most popular time for their listening is during 06.00 – 09.00 p.m. because the radio broadcasts in Karen language from Karen Radio Network. In addition, the requirement of media content relates to the community activities especially in the agriculture, for instance, an organic farming, natural resource management and organic horticulture. Furthermore, there is one interesting point is that the villages prefer the media in which it can provide the information to visualise the content in an image form.

### **Media effect and influence to the communities**

Villages in both communities are similar information exchanging pattern; they often talk and discuss during the time when they met in community or family. Moreover, they analyse and inspect the correctness of information before distributed in the community. Some villages do experiment the new knowledge by applying in their field and transferring to other when it works well and show the good results. However, the structure of governmental local community has made the problem to the communication process; Kanchana (2006) agree with this issue and argue that the Thai cultural structure of communication in the local community creates an

obstacle to the communication management, for instance, patronage culture and centralization which local community waiting for other help. The Thai local community did not face with the thing that fast changing and complex so they are rather not paying much attention to finding and managing the information. Thus, they have almost received the outside information which someone providing for and believing leader or higher status person. The results from electronic media testing in two communities show the character of media pattern which is popular, is using the demonstration technique with giving the best practice for the sample which is attractive and trustfulness. The story structure in the media content has to be clear and focus. If the story has many issues, each point must be connected the content together. Applying the special technique in the documentary video helps the media to get more attractive; this includes an applying image or real video clip from the field by inserting during the presentation.

## **Discussion**

A sustainable development or the development with decreasing gap between social statuses are needed for the right of a local community to access the information and news; these information and news must be suit with the community requirement. The effective media for the community is still lacking. The media with a good design in term of content design, media form and pattern are necessary to suit the community requirement. A content design should support community learning and opens a chance for the community to participate in media creation process; this will help the community to learn in the process and also distribute a knowledge to them. When the learning process happens, it will bring the development to the local community; this is not a top-down communication as the information receiving from the central but it is a participatory communication. This type of communication will help to change the community development; as Tichenor (1970) mentioned that the establishment of larger differentials in knowledge through society is itself a radical social effect and perhaps it is a crucial factor in the future for social change (Tichenor et al., 1970). The good media with the good content design can be used to transfer a good

research and valuable information to a local community. This study requires many research approaches to complete the investigation; there are several issues need to be concern which are (1) the study requires a certain level of applied media concept in the field and needs more time for the investigation, (2) there have a few studies of media content at the community level; this needs to be focus at different levels of community requirement including a community participation, (3) the further study should promote the applied research to open the choice of information access for community.

## **Conclusion**

This study is an applied research; it requires the interdisciplinary approach both qualitative and quantitative methods for surveying, data gathering and analysis. The result shows that most family in the two communities has amount electronic equipment more than one to receive information and news at their home. People in the villages regularly acquired the information and news through the village public address system and radio because of they are most accessible. People get the information and news at home more than the local shop in their villages. People always get all information and news after the fieldwork which is between 6.00-8.00 and 8.00-10.00 p.m. The structure of the information acquiring in the two communities are similar; they get the information and news from the central media from Bangkok through the television and the internet; however, the villages consume media contents associated to the way of their communities' life and their appropriate time. The media content consuming also relates to the characteristic media and the community activities and practices. The television and the village public address system are advantageous for people at morning and evening after their fieldwork while the community radio is appropriate in the daytime.

The villages always make discussing and exchanging information and news within their family members and their communities. A pattern of information sharing among the members of two communities is similar. People make the media judgment by analysing, inspecting and comparing

the correctness of the information and news with different media sources and channels.

For further study on this topic, the investigation of the media content design should support the levels of individual and family; this type of investigation should be increased the amount to response with the real need of the community in the way of a participatory research. Furthermore, the study needs to investigate at the level of methodology and the epistemology of the media content design to increase an opportunity of community having more choice to consume the right media.

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